SAFETY EVALUATION OR INSPECTIONS RELATED TO DNFSB LETTER ISSUES

DNFSB Comment Area	Specific Comment	Discussed in Safety Evaluation Report or Inspection Reports	Examples of Selected Question Nos. or Inspection Report Nos.
Safety Standards and Processes	- Unmitigated accident consequences versus mitigated accident consequences	- LAW SER Section 4.1.2.2, Item 1 (SER Condition of Acceptance to include analysis related to mis-feed of high-level waste to the LAW facility)	LAW-PCAR-098
	- Use of radiological exposure standards as cut-offs	- Not observed	
	- Use of target probabilities as acceptance criteria	- Target frequencies have been deleted as criteria. ABCN 24590-WTP-ABCN-ESH-02-019 (approved) and SER Section 4.3.2.2, Item 4 (in preparation)	
Design Basis Events	- Evaluation of beyond DBE events, such as chemical hazards	- HLW SER Section 4.2.2.2, Item 6.a, discussed beyond DBEs for glass spills - SER Section 4.6, Operations Risk Assessment considers beyond DBE earthquake and all initiating events.	HLW-PCAR-012 HLW-PSAR-191
Hydrogen Generation Rates	- Use of non-conservative hydrogen generation rates	- HLW SER Section 4.2.2.2, Item 4 and PT SER Section 4.3.2.2, Item 3 (in preparation) (SER Condition of Acceptance to revise hydrogen generation and severity level calculations)	HLW-PSAR-235 PT-PSAR-023 PT-PSAR-293 PT-PSAR-294 PT-PSAR-336
Erosion and Corrosion of Pipes and Vessels	- High erosion rates in nonlinear pipe segments	- PT SER Section 4.3.1.2, Process Description, Item 3 (in preparation) (SER Condition of Acceptance to assess tank waste characterization data and re-evaluate erosion/corrosion requirements)	HLW-PSAR-097 PT-PSAR-068 PT-PSAR-215
Cesium Ion Exchange	- Buildup of hydrogen during loss of power - Overheating of resin material during loss of power	- PT SER Section 4.3.1.1, Process Description, Item 9 (in preparation) (SER Condition of Acceptance to perform laboratory tests to determine safe upper	PT-PSAR-025 PT-PSAR-034

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	- Emergency elution capability	limit for nitric acid) - PT SER Section 4.3.2.2, Item 3 (in preparation) (SER Condition of Acceptance to revise hydrogen generation and severity level calculations) - PT SER, Section 4.3.2.2, Item 3 (in preparation) (SER Condition of Acceptance to reconsider the need for the emergency elution system)	
- Feedback and Improvement: Tracking of Design Assumptions Critical to Safety	- Design assumptions used during safety analyses were not being tracked (e.g. closure of unverified safety basis assumptions)	-Tracking of design assumptions was identified as a finding in Design Process Inspection (IR-02-015)	HLW-PSAR-001 PT-PSAR-103 PT-PSAR-157
- Implementation of Safety Controls: Design Features Critical to Safety	- ISM process may not capture critical design features relied on for safety (e.g., contact of CXP resin with permanganate)	- Issue was identified in an OSR Design Process Inspection (IR-02-015) - PT SER Section 4.3.2.2, Item 2 (in preparation) (SER Condition of Acceptance to verify design features for diluting sodium permanganate)	PT-PSAR-025
- Analyze Hazards: Unanalyzed Conditions	Conditions were not identified and evaluated during ISM process. For example: - Loss of Cooling Impacts (e.g., increased hydrogen generation rates and ventilation system loading)	- HLW SER Section 4.2.2.2, Item 2 (SER Condition of Acceptance to include hazard evaluation results for internal flooding events) - PT SER Section 4.3.2.2, Item 6 (in preparation) (SER Condition of Acceptance to assess failure of temperature control or steam valve failure in caustic leaching) - PT SER Section 4.3.2.2, Item 6 (in preparation) (SER Condition of Acceptance to evaluate a tank steam bump DBE)	LAW-PSAR-036 HLW-PSAR-003 PT-PSAR-098 PT-PSAR-198 PT-PSAR-256

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	- Flashing through Spray Leaks	- Not raised as an issue	
- Engineering Calculations	- Lack of Technical Quality	- Lack of Technical Quality was discussed in SER Section 6.3, SRD and ISMP Acceptability and Compliance, Item 1 (SER Condition of Acceptance to implement corrective actions defined in CCN: 042775, addressing engineering improvements, dated October 30, 2002) - PT SER Section 4.3.2.2, Item 3 (in preparation) (SER Condition of Acceptance to correct identified calculation errors) - OSR Inspections were performed on the Engineering process: - Configuration Management IR-02-007 - Standards Selection IR-02-013 - Standards Implementation IR-02-012 - Design Process Implementation IR-02-015 - ORP letter to BNI, 02-OSR-0480 on engineering problems, dated October 4, 2002 - BNI letter to ORP, CCN: 042775 - ORP Readiness Inspection No. A-03-OSR-RRPWTP-002	LAW-PCAR-039 LAW-PCAR-040 LAW-PSAR-211 HLW-PSAR-053 HLW-PSAR-061 HLW-PSAR-067 HLW-PSAR-156 HLW-PSAR-221 HLW-PSAR-234 PT-PSAR-023 PT-PSAR-042 PT-PSAR-199 PT-PSAR-258 PT-PSAR-259